

## A NEW GENUS AND SPECIES OF ALEYRODIDÆ FROM BRITISH GUIANA.

A. L. QUAINANCE and A. C. BAKER,  
Bureau of Entomology.

We have recently received from Mr. G. E. Bodkin, Government Biologist of the Science and Agricultural Department, British Guiana, specimens of an interesting white fly, found by him March 2, 1915, on leaves of *Erythrina glauca* Wild., at the Rose Hall plantation, Berbice.

The insect is most closely related to species of *Dialeurodicus* (subfam. Aleurodicinæ) and differs in the pupa case from these principally in the presence of reduced compound wax pores, and in the character of the vasiform orifice. The genus appears to fall between *Dialeurodicus* and *Aleurodicus*.

### Genus *Eudialeurodicus*, n. gen.

Forewing similar to that of *Dialeurodicus* with radius, radial sector and media retained. Vertex rounded; frons produced beyond the vertex; antennæ of seven segments. Paronychium a stout spine.

Pupa case flat, resembling *Dialeurodicus*, but with one or more pairs of reduced compound wax pores. Vasiform orifice small, the lingula included and broadly rounded.

Type *bodkini* Quaintance and Baker.

### *Eudialeurodicus bodkini* n. sp.

*Egg*.—(Plate XXVI, Fig. 16), Elongate, yellowish in color, size 0.4 x 0.11 mm. Shell without markings; stalk short, attached at one side of basal end.

*Pupa case*.—(Plate XXVI, Figs 1 and 6), On the leaf the insects are located principally along the midrib and larger veins. The case is more or less hid by the copious secretion of glassy, whitish wax, occurring in two concentric rings or bands. From the margin of case all around is produced a fringe of closely placed threads of wax which basally has the form of a solid more or less vertical ring, and which persists on the leaf after removal of case. Just within this ring is usually a circle of polygonal areas which may also be present over the entire area which had been covered by the ventral surface of the case. Another secretion originates from the submarginal area of the dorsum in the form of a band or ring of amorphous white wax. This is variable in extent and in some individuals becomes a plate covering the body, the periphery being irregular, while the more central area is concave. Leaves frequented by the adults show powdery white wax.

The pupa case proper is flat, yellow in color with a large dark brown area on the thorax and also on the abdominal region. These brown areas vary in extent and may become coalescent, covering practically the entire dorsal disc. Size of case about 1.66 mm., by 1.5 mm., ovate in outline, widest caudad centre. Body segments quite distinct on dorsal disc. Margin of case, (Plate XXVI, Fig. 7), is seen under high magnification to be practically entire, though appearing incised under lower power, due to the presence just within margin of a series of small, fusiform glands, and from which delicate sutures extend mesad. On caudal segment of case is a pair of reduced compound pores, (Plate XXVI, Fig. 2), each giving rise to a long slender spine homologous apparently to the so-called "central process." A single reduced pore is usually present on the third abdominal segment well to one side of the median line, either to the right or left, more usually on the right side, (Plate XXVI, Fig. 3). We have seen no instance in which both pores were present in the same individual. The variability in position of this pore and the rudimentary condition of the pores on the anal segment indicate the intermediate status of the species between *Dialeurodicus* in which no pores are present, and *Aleurodicus* in which genus these are mostly well developed. Numerous minute pores, appearing as clear white dots, are scattered over the body, some of which occur in groups, especially on the abdomen.

Vasiform orifice, (Plate XXVI, Fig. 13), small, transversely elliptical in general outline, the cephalic margin being straight. The operculum about half fills the orifice, is transversely elongate, the sides rounded and caudal margin concave. The lingula is much shortened, broadly rounded about one-third as long as the orifice. On ventral surface of case the antennæ and legs are distinct, each of the latter terminating in a hooked spine. (Plate XXVI, Figs. 5 and 17).

*Adult* ♀.—Length from head to tip of abdomen about 2.5 mm. Forewing about 2.5 mm., long by 1.63 mm., wide, rounded, marked with small groups of dots as shown in the figure, (Plate XXVI, Fig. 8); hind wing unmarked. Hind tibia about 0.9 mm., long, hind tarsi together 0.5 mm., in length, the basal joint being about twice the length of distal; claw usual, with spine like paronychium, (Plate XXVI, Fig. 15). The general color of body is yellow with brown coloration on legs, body sutures, parts of antennal joints, etc.; the tip of mentum is dark brown or blackish. Vertex rounded and armed with a row of stout spines. Frons armed with tubercles (Fig. 14). Head not showing the cone shaped extension of the vertex present in species of *Dialeurodicus*. Compound eyes "dumb bell" shaped, dark red or brown. Ocelli prominent. Antennæ (Plate XXVI, Fig. 18) of seven segments; segment I, short, cup-shaped; II, over twice as long as I, fusiform, dusky in color. Segment III, about 0.35 mm., in length, not quite as long as the four distal joints together, slender, dusky on distal fourth armed with about fifteen sensoria. Segments IV and V subequal in length as are joints VI and VII. Segments III-VII imbricated.

*Adult* ♂.—Essentially like female, though smaller; genital segment 0.5 mm., long; claspers, (Plate XXVI, Fig. 12), sickle like, about as long as the genital segment. Penis about half as long as claspers. From the segment cephalad of the genital segment arises a pair of long curved processes, extending caudad well beyond the end of anal segment, structures which we have not previously observed in the family, (Plate XXVI, Fig. 10).

Type, No. 19592, U. S. National Museum.

Described from pupae on leaves, pupae, adults, and eggs in balsam mounts, prepared by Mr. G. E. Bodkin, to whom we have pleasure in dedicating the species.

---

#### EXPLANATION OF PLATE XXVI.

- Fig. 1.—Pupa case; dorsal view.  
2.—Compound wax pore.  
3.—Reduced compound wax pore.  
4.—Clustered simple pores.  
5.—Foot of pupa case.  
6.—Pupa case; ventral view.  
7.—Margin of pupa case.  
8.—Forewing of Adult.  
9.—Costal margin of forewing.  
10.—Caudal portion of abdomen of male, showing appendages.  
11.—Head of adult.  
12.—Claspers of male.  
13.—Vasiform orifice of pupa case.  
14.—Tubercles on frons of adult.  
15.—Foot of adult.  
16.—Egg.  
17.—Tip of Antenna of pupa case.  
18.—Distal segments of antenna of female.

